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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,289	04/05/2005	Tatsuya Igarashi	0649-1070PUS1	7753
2292 7590 03/11/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040 0747			EXAMINER	
			GARRETT, DAWN L	
FALLS CHURG	FALLS CHURCH, VA 22040-0747		ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			03/11/2008	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
	10/530,289	IGARASHI ET AL.
Office Action Summary	Examiner	Art Unit
	Dawn Garrett	1794
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tinwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>05 A</u> This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowed closed in accordance with the practice under the practice under the practice.	s action is non-final. ance except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) 1-12 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-12 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o Application Papers 9) The specification is objected to by the Examine	awn from consideration.  or election requirement.	
10) The drawing(s) filed on is/are: a) accomposite and any objection to the Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the oath or declaration is objected to by the E	e drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received au (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 10-14-05; 4-5-05.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate

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## **DETAILED ACTION**

1. This application is a 371 of PCT/JP03/17048. Claims 1-12 are pending.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2002/0125818 A1). Sato et al. discloses organic electroluminescent devices comprising, between an anode and a cathode, a light emitting layer comprising a host material having an electron-transporting or hole-transporting property and a compound capable of phosphorescence (see abstract). Suitable host compounds include those according to general formula I (see par. 52), which include the more specific compound CBP (per claims 6-8):

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Other host material includes electron transporting compounds such as TPBI per claims 9, 10 and 12 (see page 30, top of second column):

Sato et al. discloses a plurality of host materials may be used together (see page 30, par. 128). Phosphorescent dopant may include iridium compounds such as Ir(ppy)<sub>3</sub> (see par. 134-150). Compounds CBP, TPBI and Ir(ppy)<sub>3</sub> are all within the parameters of those claimed by applicant and are used in the instant examples. Accordingly, the compounds are considered to satisfy the properties set forth in the claims as they read upon the compounds disclosed by applicant. Although Sato et al. is silent with respect to examples showing a hole-transporting host and electron-transporting host used in combination according to the instant claims, it would have been obvious to one of ordinary skill in the art at the time of the invention to have formed a luminescent layer comprising a mixture of host materials and a phosphorescent dopant, because Sato et al. clearly teaches a plurality of host materials may be used together.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2002/0125818 A1) in view of Ise et al. (US 6,962,755). Sato et al. is relied upon as set forth above. Sato et al. discloses organic electroluminescent devices comprising,

between an anode and a cathode, a light emitting layer comprising a host material having an electron-transporting or hole-transporting property and a compound capable of phosphorescence (see abstract). Also, Sato et al. discloses a plurality of host materials may be used together (see page 30, par. 128). Sato et al. is silent with respect to specifically disclosing an electron-transporting host according to the formula set forth in claim 11, but does teach other azoles such as TPBI. Ise et al. teaches in analogous art compounds according to formula A-III (see col. 13) and more specifically compounds such as A-19 (see Table 1) as electron transporting material for an EL device. It would have been obvious to one of ordinary skill in the art to have selected the azole compounds taught by Ise et al. for the Sato et al. host material, because one would expect the Ise et al. electron transporting azole compounds to be similarly useful as an electron transporting material in the Sato et al. device.

Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing KSR, 127 S.Ct. at 1740, 82 USPQ2d at 1396). Accordingly, since the applicant has submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is no more than the predictable use of prior art elements according to their established

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functions resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/ Primary Examiner, Art Unit 1794